

PROPOSED MURRAY ROAD APARTMENT DEVELOPMENT FOR:

LTBB ODAWA INDIANS

PETOSKEY, MICHIGAN

SITE/CIVIL BID PACKAGE

DRAWING SET 3

SITE LOCATION MAP



SHEET INDEX

- T TITLE SHEET / PROJECT INFORMATION
- C1.0 EXISTING CONDITIONS AND DEMOLITION PLAN
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- C2.1 SEISC DETAILS
- C3.0 OVERALL SITE PLAN
- C3.1 SITE DETAILS
- C4.0 GRADING PLAN
- C5.0 UTILITY PLAN
- C5.1 UTILITY DETAILS
- C5.2 UTILITY DETAILS

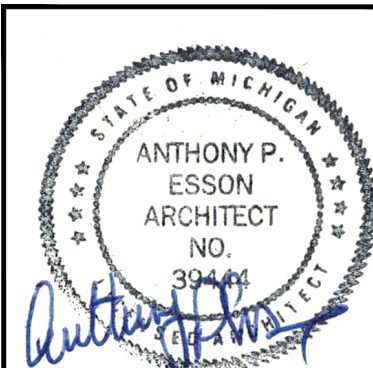
REVIEWED FOR CODE COMPLIANCE

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BUREAU VERITAS NORTH AMERICA, INC.

SIGNATURE: fmvers

DATE: 01/23/2023



STATE OF MICHIGAN
REGISTRATION

SHEET

T

DATE

MAY 1, 2020
NOV. 30, 2022
JAN. 18, 2023

PROJECT NO.

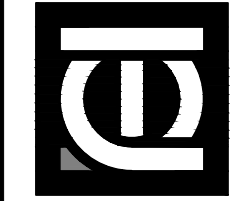
273-19

PROJECT TITLE

LITTLE TRAVERSE BAY BAND OF ODAWA INDIANS
MURRAY ROAD APARTMENT DEVELOPMENT
PETOSKEY, MICHIGAN

DRAWING TITLE

BUILDINGS 3, 5 & 6
TITLE SHEET & PROJECT INFORMATION



ANTHONY P. ESSON
ARCHITECT
PO BOX 479
GAYLORD, MICHIGAN
TELEPHONE: (989) 732-0585

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PROPOSED LEGEND

- LIMITS OF DISTURBANCE
PAVEMENT MARKING REMOVAL
UTILITY REMOVAL
REMOVE CONCRETE
REMOVE ASPHALT
CLEARING AND GRUBBING

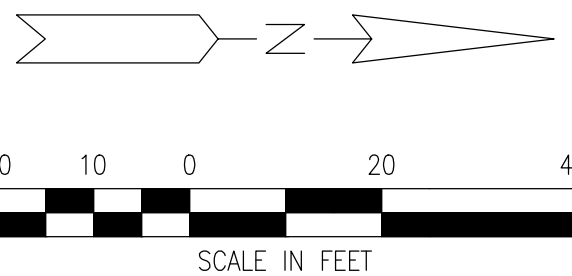
SITE REMOVAL ITEMS

ITEM	DESCRIPTION
1	CONCRETE
2	ASPHALT
3	TREES AND BRUSH
4	CULVERT END SECTION
5	STORM SEWER
6	FENCE
7	CATCH BASIN
8	PAVEMENT MARKINGS

EXISTING LEGEND

- POWER POLE
LAMP POLE
SIGN POST
SANITARY MANHOLE
CLEAN OUT
STORM MANHOLE
TELEPHONE PEDESTAL
CONTROL POINT
BENCH MARK
DOMESTIC WATER
SANITARY SEWER
STORM SEWER
EDGE OF WOODS
BUILDING
CHAIN LINK FENCE
EDGE OF GRAVEL
CONTOUR MAJOR
CONTOUR MINOR
CONTOUR LABEL

XXX



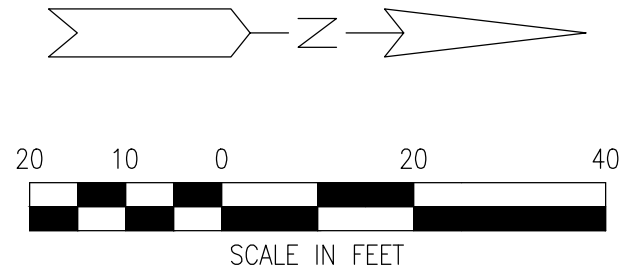
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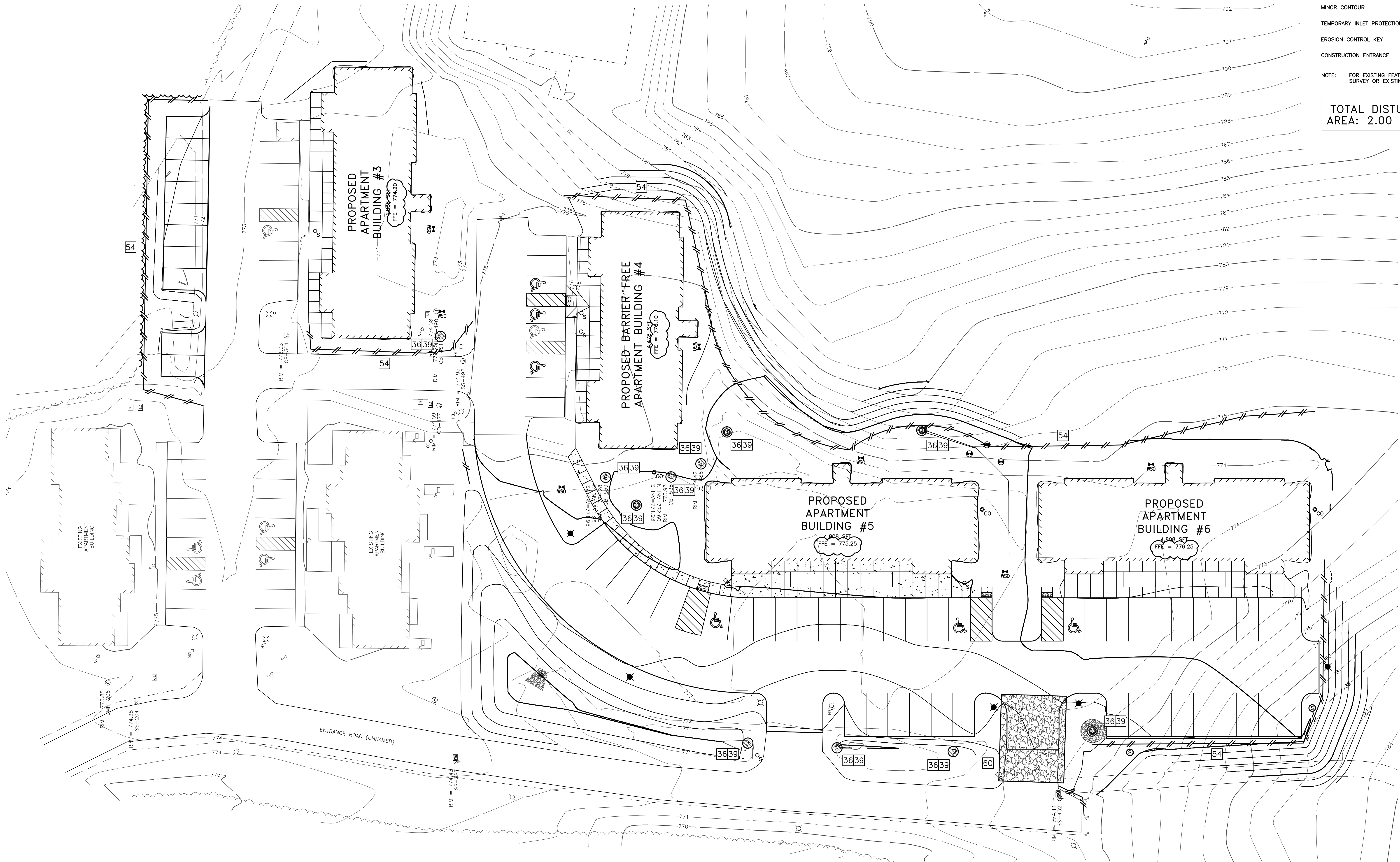


PROPOSED LEGEND

- TEMPORARY SILT FENCE:
- MAJOR CONTOUR:
- MINOR CONTOUR:
- TEMPORARY INLET PROTECTION:
- EROSION CONTROL KEY:
- CONSTRUCTION ENTRANCE:

NOTE: FOR EXISTING FEATURES SEE TOPOGRAPHIC SURVEY OR EXISTING CONDITIONS PLAN.

TOTAL DISTURBED
AREA: 2.00 ACRES



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WTF PROJECT #
02-2023-010

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DRAWING TITLE
SESC PLAN

PROJECT TITLE
LITTLE TRAVERSE BAY BAND OF OJAWA INDIANS
MURRAY ROAD APARTMENT DEVELOPMENT
PETOSKEY, MICHIGAN

PROJECT NO.
273-19

DATE
MAY 1, 2020

SHEET
C2.0



Know what's below.
Call before you dig.

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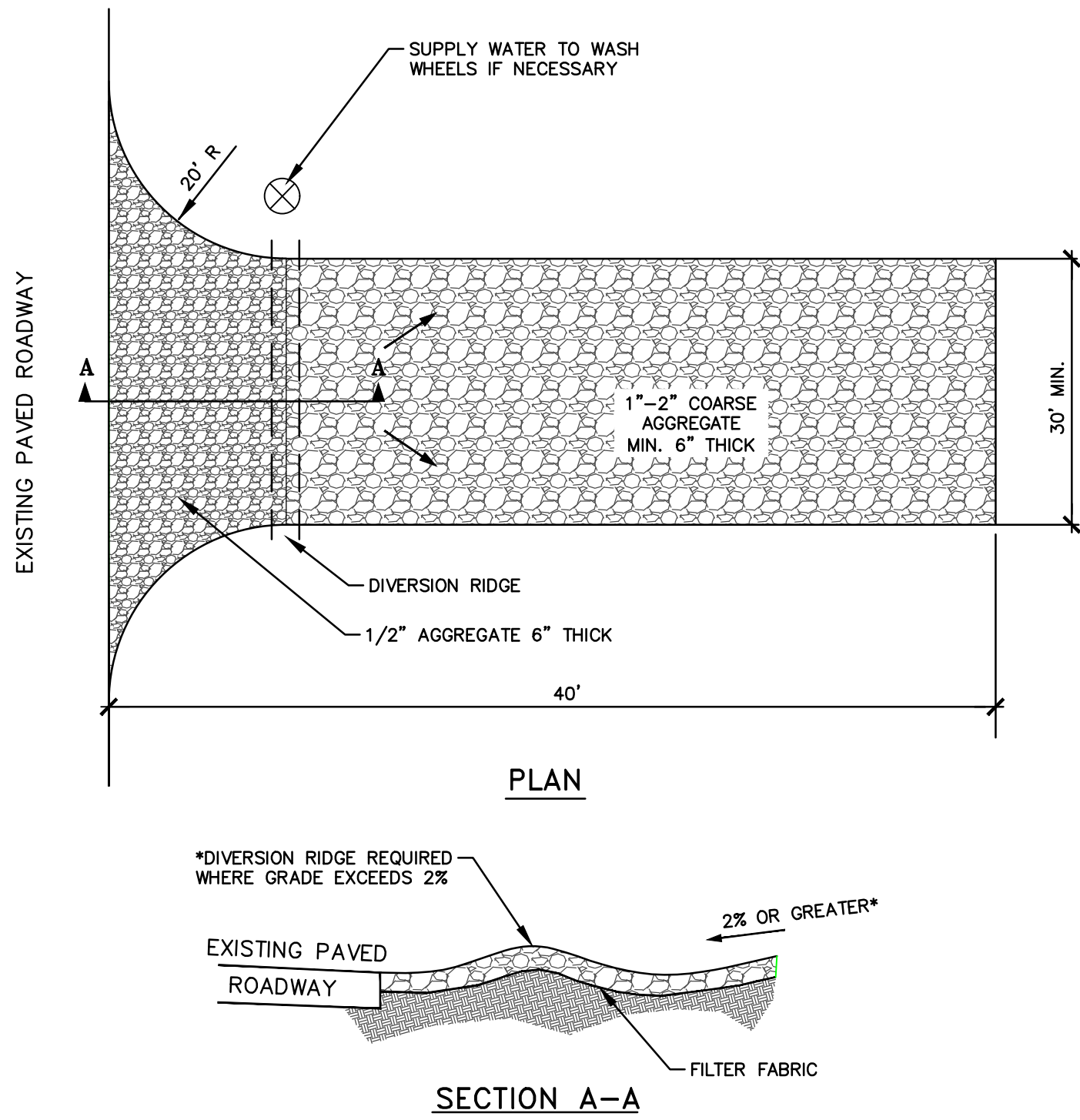
SIGNATURE: fmvets

DATE: 01/23/2023

MICHIGAN UNIFIED
KEYING SYSTEM
(MODIFIED)

* indicates applicability of a specific control measure to one or more of the seven problem areas

KEY	DETAIL	CHARACTERISTICS	A	B	C	D	E	F	G
2	Selective Grading & Sealing	WATER CAN BE DIVERTED TO MINIMIZE EROSION. FLATTER SLOPES EASE EROSION PROBLEMS.	*				*	*	*
4	Vegetative Stabilization	MAY UTILIZE A VARIETY OF PLANT MATERIAL. STABILIZES SOIL. FILTERS SEDIMENT FROM RUNOFF.	*	*	*		*	*	*
6	Seeds with Soil Seed and Water	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER. EFFECTIVE FOR DRAINAGEWAYS WITH LOW VELOCITY. EASILY PLACED IN SMALL QUANTITIES BY RE-ENTRANCED PERSONNEL. SHOULD INCLUDE PREPARED TOPSOIL BED.	*		*			*	*
13	Riprap, Rubble, Gravel	USED WHERE VEGETATION IS NOT EASILY ESTABLISHED. EFFECTIVE FOR HIGH VELOCITIES OR HIGH CONCENTRATIONS. PROMPTS RUNOFF TO INFILTRATE SOIL. DISSIPATES ENERGY FLOW AT SYSTEM OUTLETS.	*	*	*				
34	Sediment Basin	TRAPS SEDIMENT. REDUCES RUNOFF AT NON-EROSIVE BASIN. CONTROLS RUNOFF AT SYSTEM OUTLETS. CAN BE VISUAL MONITORED.			*	*			
36	Catch Basin Inlet Protection	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF. MAY USE FILTER CLOTH OVER INLET.					*		*
39	Fabric Filter Cloth Fine Filtration	CAN UTILIZE MATERIAL FOUND ON SITE. EASY TO CONSTRUCT. FILTERS SEDIMENT FROM RUNOFF.				*			*
54	Silt Fence	USES GEOTEXTILE FABRIC AND POSTS OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY.	*		*		*		*
60	Temporary Construction Entrance	ASSISTS IN REMOVING SOIL FROM THE TIRES OF CONSTRUCTION EQUIPMENT/VEHICLES WHEN ENTERING THE CONSTRUCTION SITE. THIS REDUCES TRACKING EXCESSIVE SEDIMENT/SOIL ONTO THE ADJACENT ROAD.							*



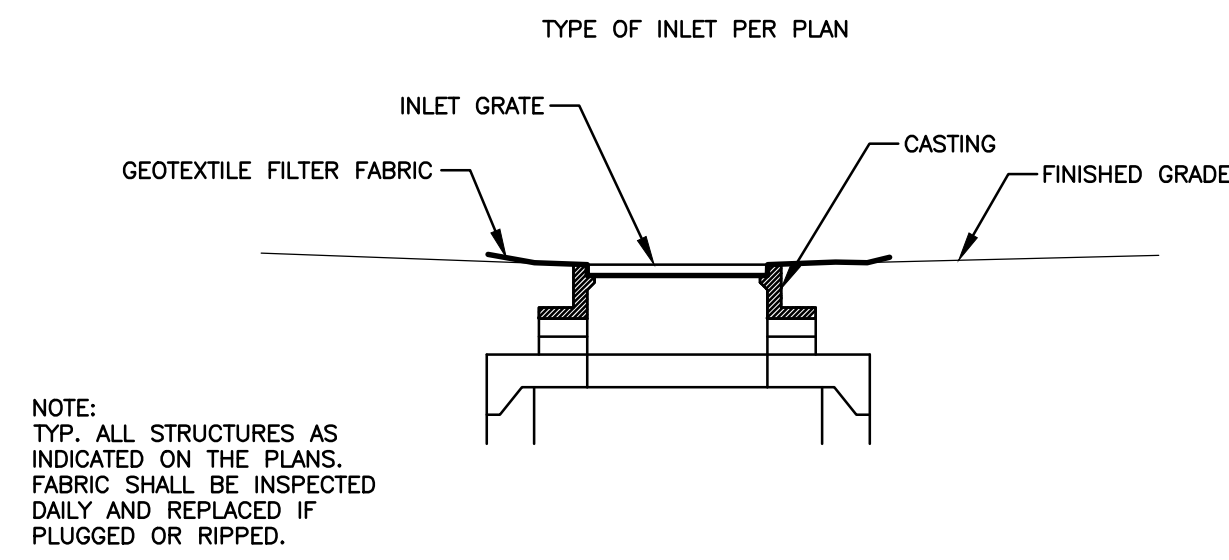
APPLICATIONS

1. ASSISTS IN REMOVING SOIL FROM THE TIRES OF CONSTRUCTION EQUIPMENT/VEHICLES WHEN EXITING THE CONSTRUCTION SITE. THIS REDUCES TRACKING EXCESSIVE SEDIMENT/SOIL ONTO THE ADJACENT ROAD.

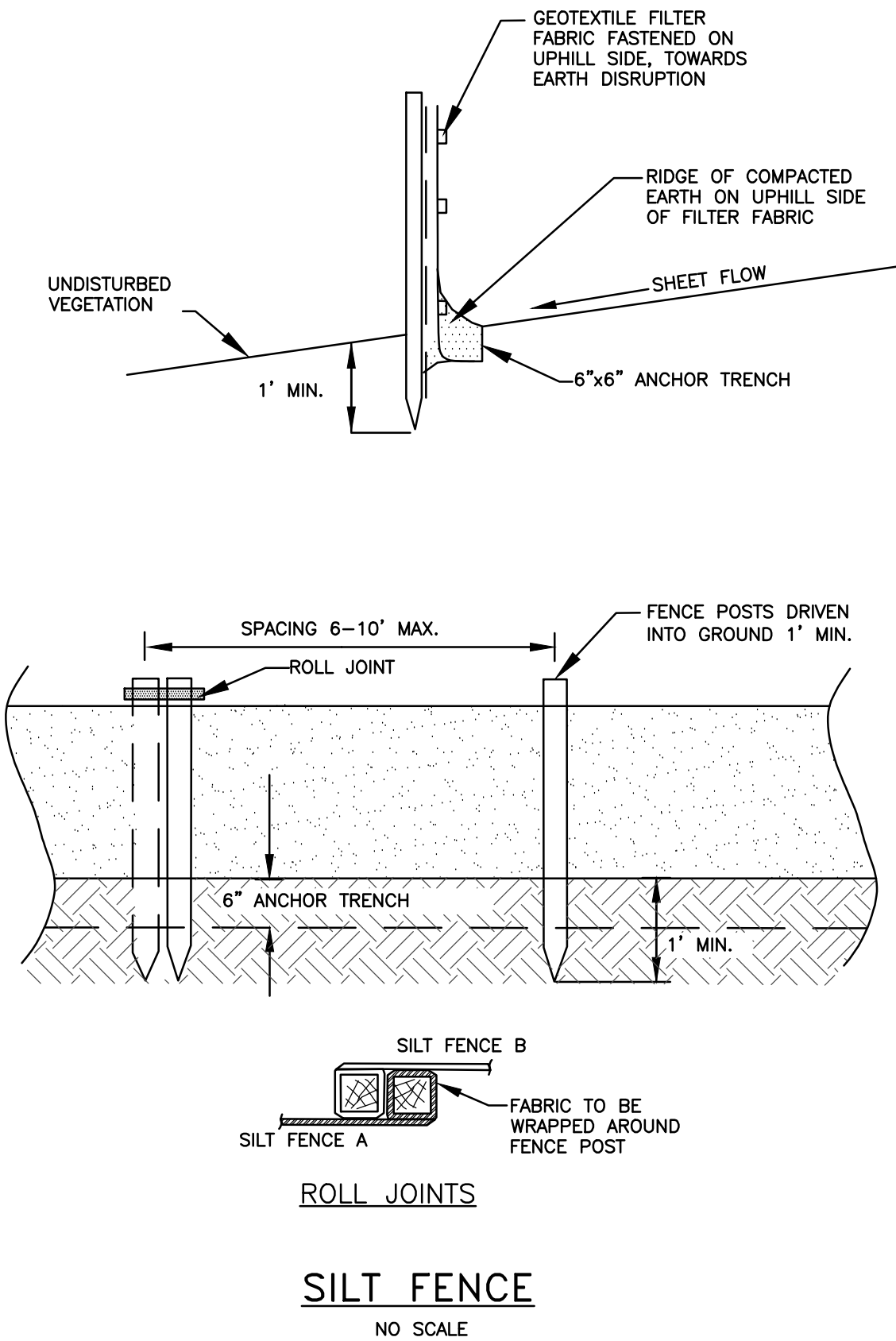
DESIGN

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ON PUBLIC RIGHTS-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

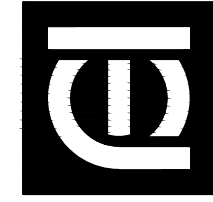
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
NO SCALE



TYPICAL INLET PROTECTION
NO SCALE



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DRAWING TITLE

SESC DETAILS

PROJECT TITLE

LITTLE TRAVERSE BAY BAND OF OJAWA INDIANS
MURRAY ROAD APARTMENT DEVELOPMENT
PETOSKEY, MICHIGAN

PROJECT NO.

273-19

DATE

MAY 1, 2020

SHEET

C2.1



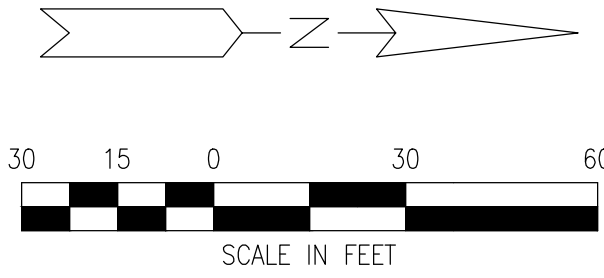
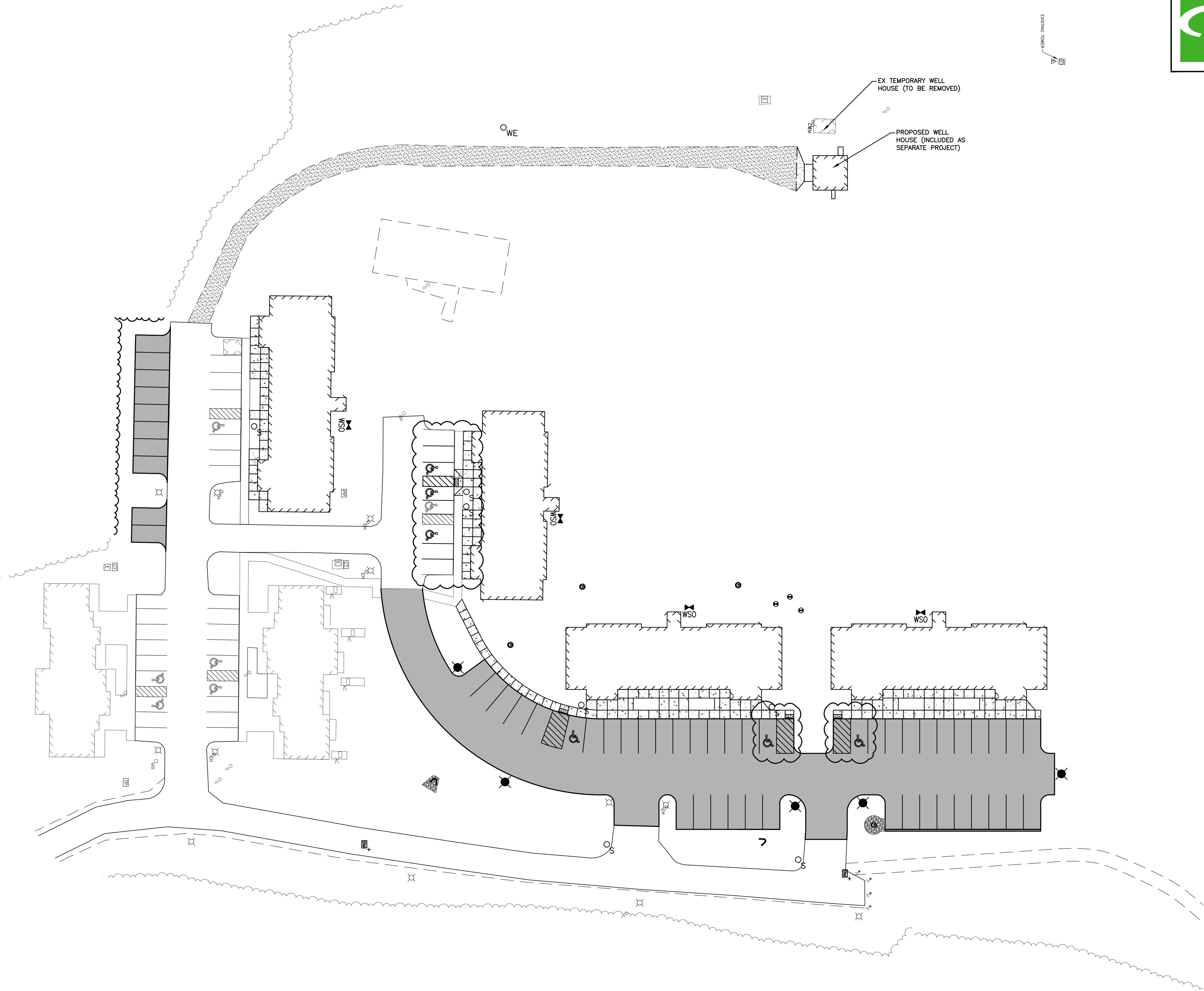
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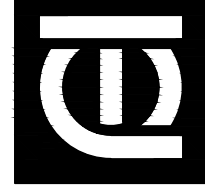
BUREAU VERITAS NORTH AMERICA, INC.

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WT PROJECT # 22-032-010



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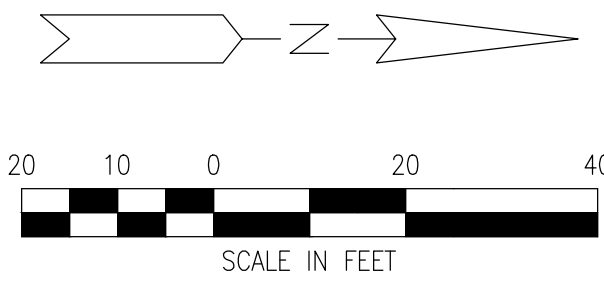
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273-19

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SHEET
C3.0

DRAWING TITLE
OVERALL SITE PLAN



PROPOSED LEGEND

- BUILDING LINE
PARKING COUNT
SIGN AND SIGN POST
ASPHALT PAVEMENT
SEE DETAIL ON SHEET C3.1
CONCRETE SIDEWALK
SEE DETAIL ON SHEET C3.1

NOTES

1. ALL DIMENSIONS ARE TO EDGE OF SIDEWALK OR EDGE OF ASPHALT.
2. ALL PARKING LOT STRIPING SHALL BE IN ACCORDANCE WITH THE "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
3. CONTRACTOR IS RESPONSIBLE FOR PROPER TRAFFIC CONTROL DURING CONSTRUCTION IN ACCORDANCE WITH THE "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
4. PROPOSED CONCRETE SIDEWALK WILL BE ADA COMPLIANT. SIDEWALK CROSS SLOPES WILL NOT EXCEED 2.0% AND SIDEWALK RUNNING SLOPES WILL NOT EXCEED 5.0% EXCEPT WHERE BARRIER-FREE RAMPS ARE LOCATED.



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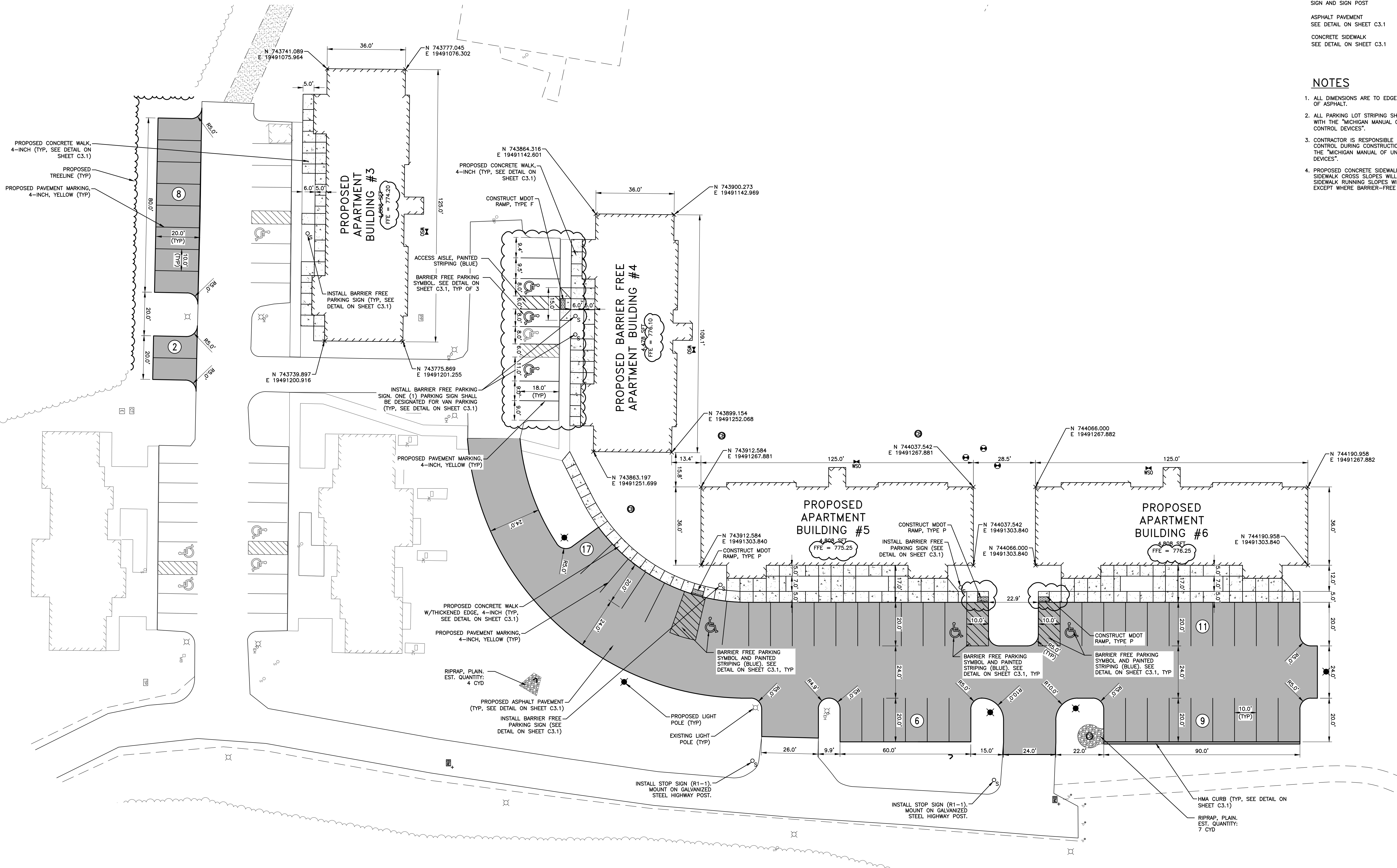
DRAWING TITLE
SITE PLAN

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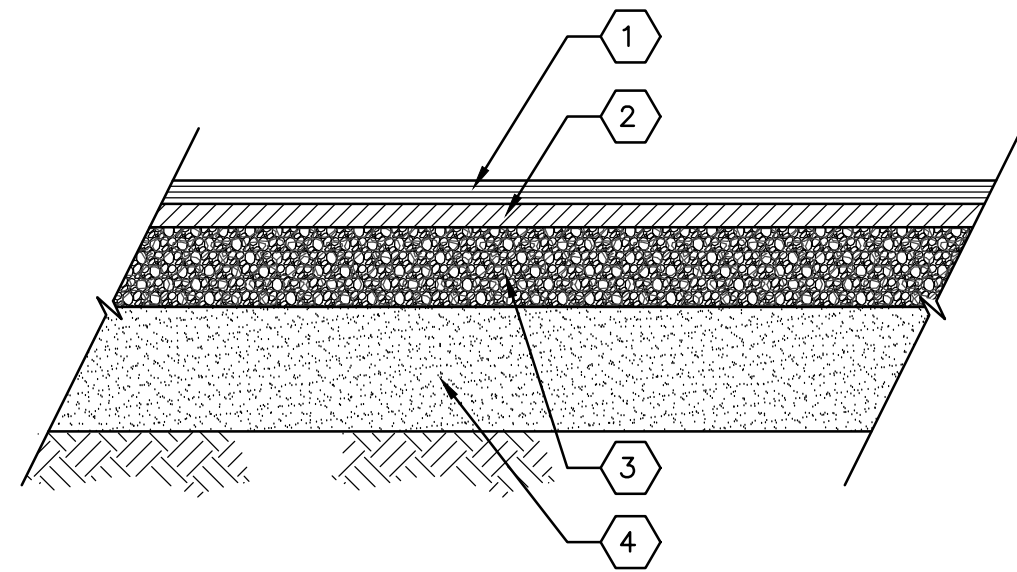
BUREAU VERITAS NORTH AMERICA, INC.

SIGNATURE: fmvers

DATE: 01/23/2023



Know what's below.
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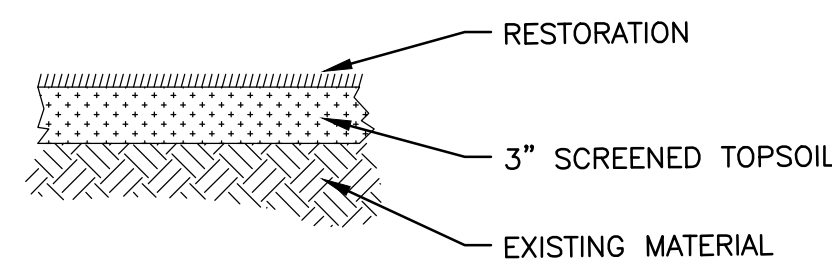


BITUMINOUS PAYEMENT SECTION

NO SCALE

SPECIFICATIONS		
ITEM	THICKNESS	MATERIAL
1	1 1/2"	HMA, 5EL
2	1 1/2"	HMA, 4EL
3	8"	MDOT 22A AGGREGATE
4	12"	MDOT CLASS II SAND

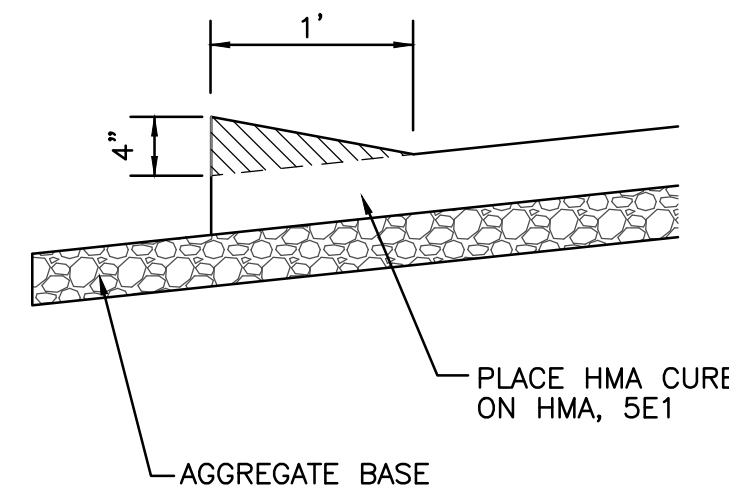
REFER TO PROJECT SPECIFICATIONS FOR COMPACTION AND TESTING REQUIREMENTS.



LAWN AND FIELD RESTORATION SECTION

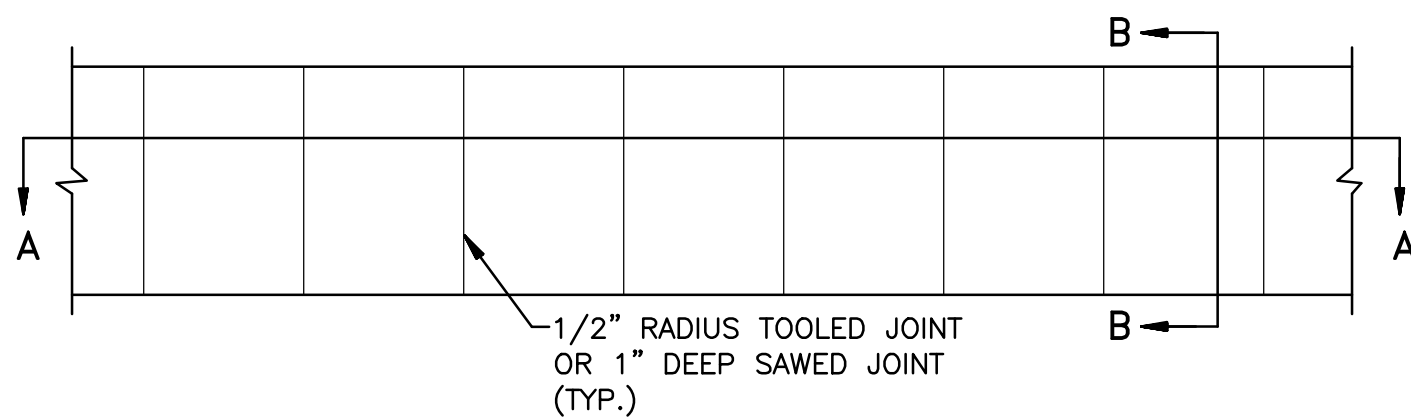
NO SCALE

NOTE: HMA CURB TO BE PLACED WITH PAVER (NOT BY HAND).



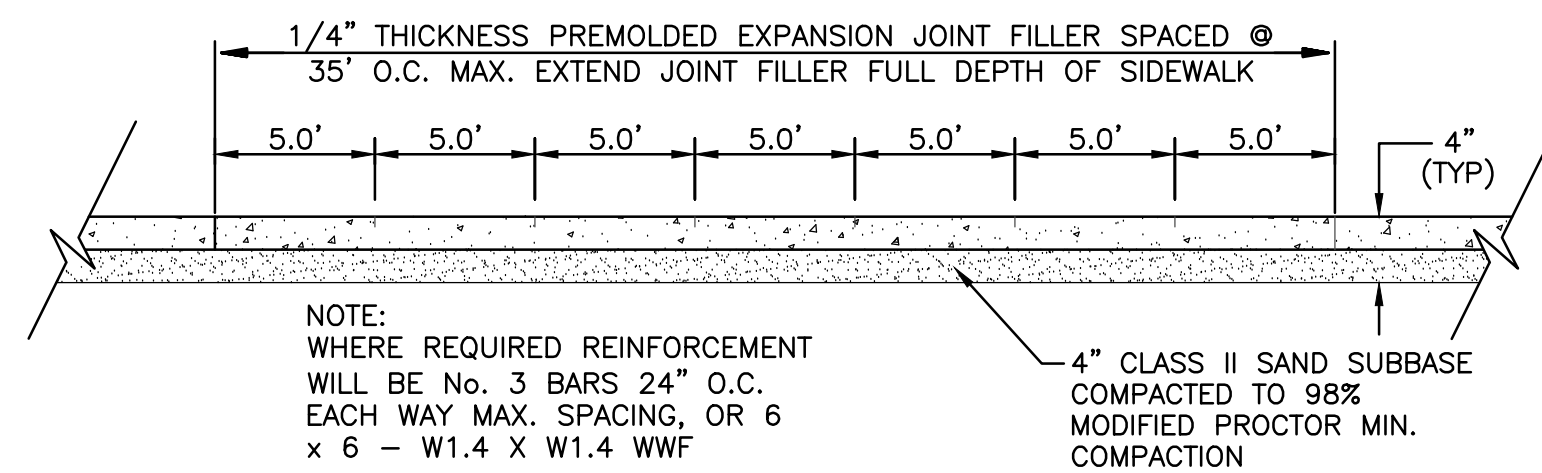
HMA CURB

INSTALL HMA CURB INTEGRALLY WITH PARKING LOT HMA.



PLAN VIEW

NO SCALE

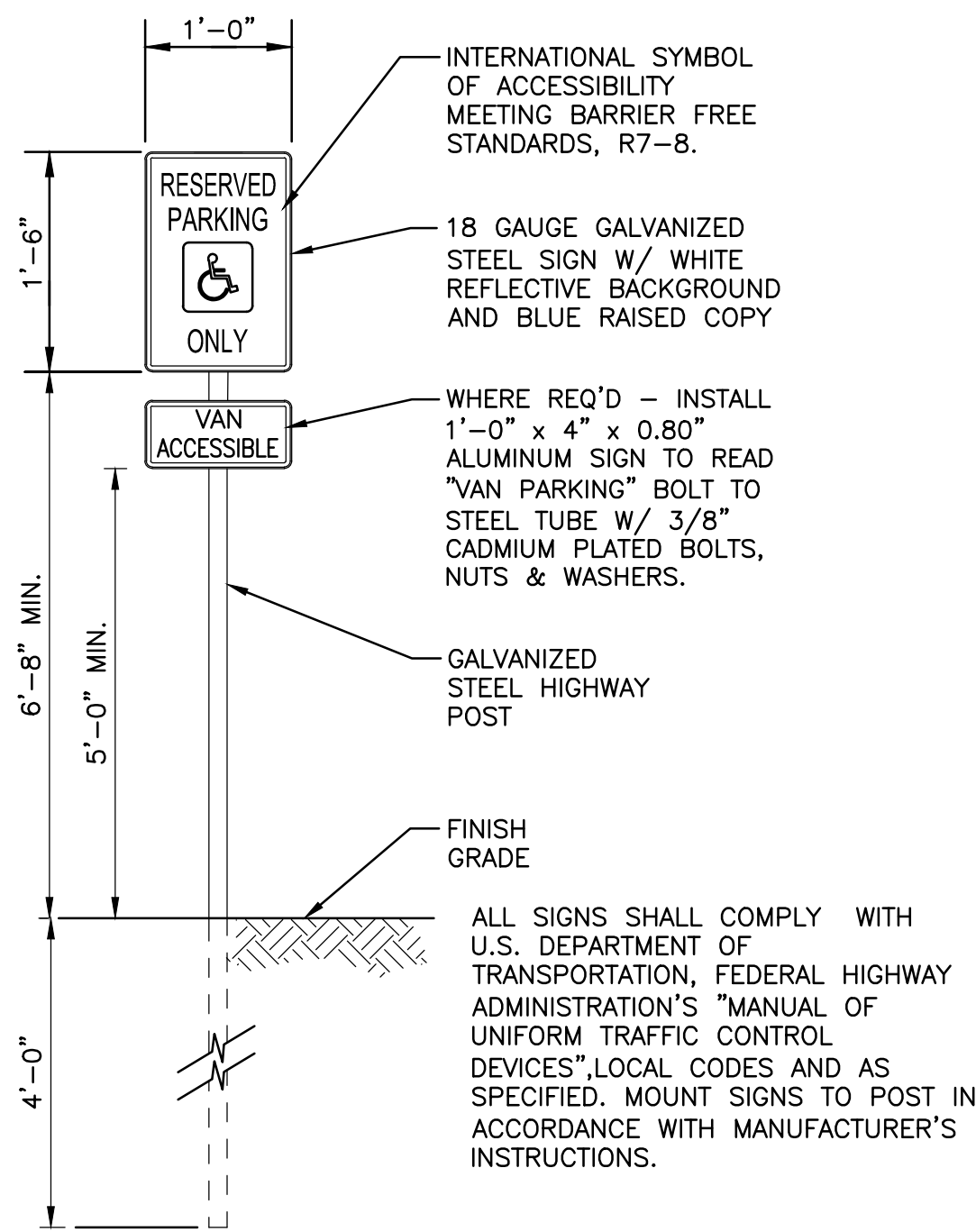


SECTION A-A

NO SCALE

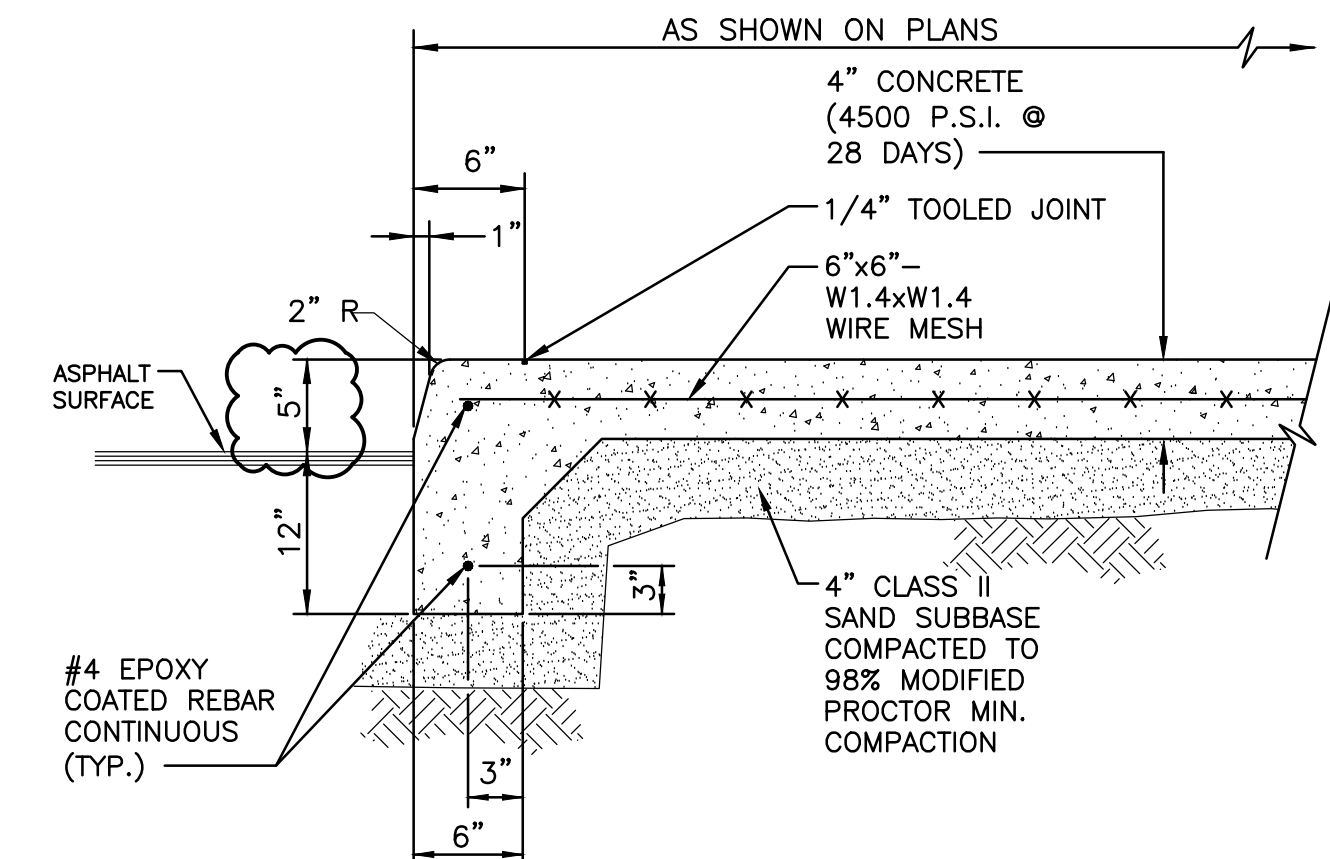
CONCRETE SIDEWALK

NO SCALE



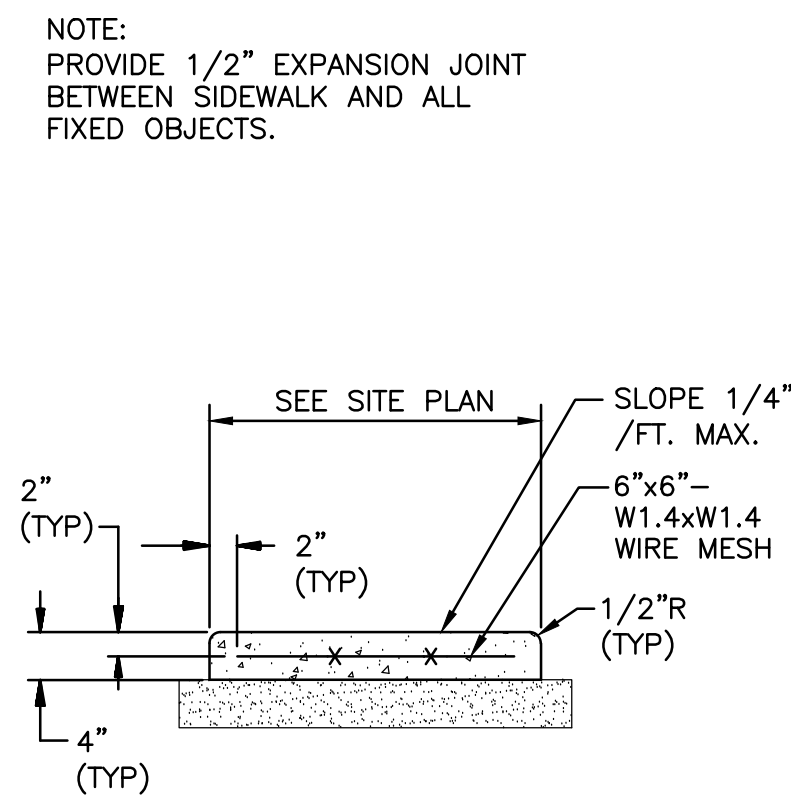
TYPE I SIGN DETAIL

NO SCALE



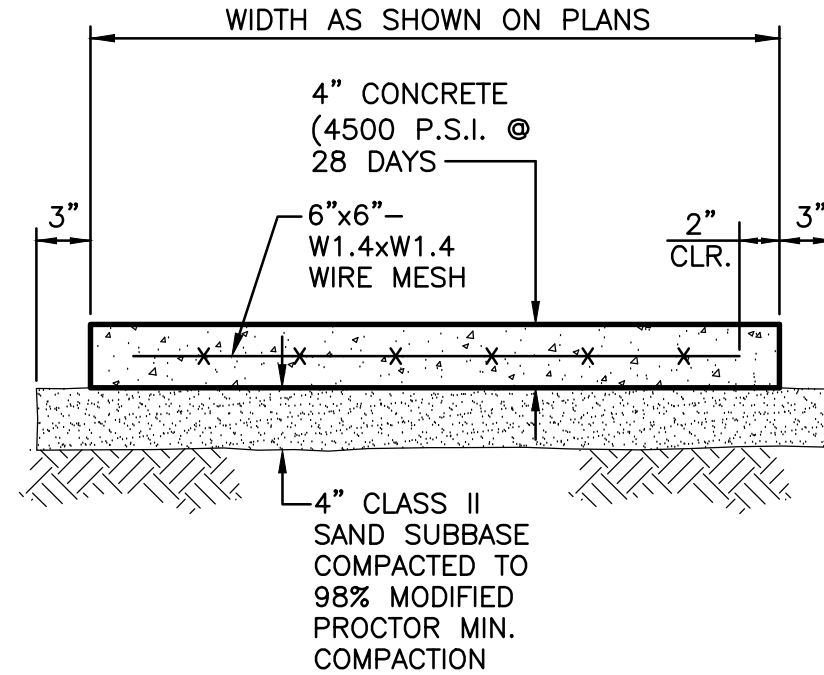
CONCRETE WALK W/ THICKENED EDGE

NO SCALE



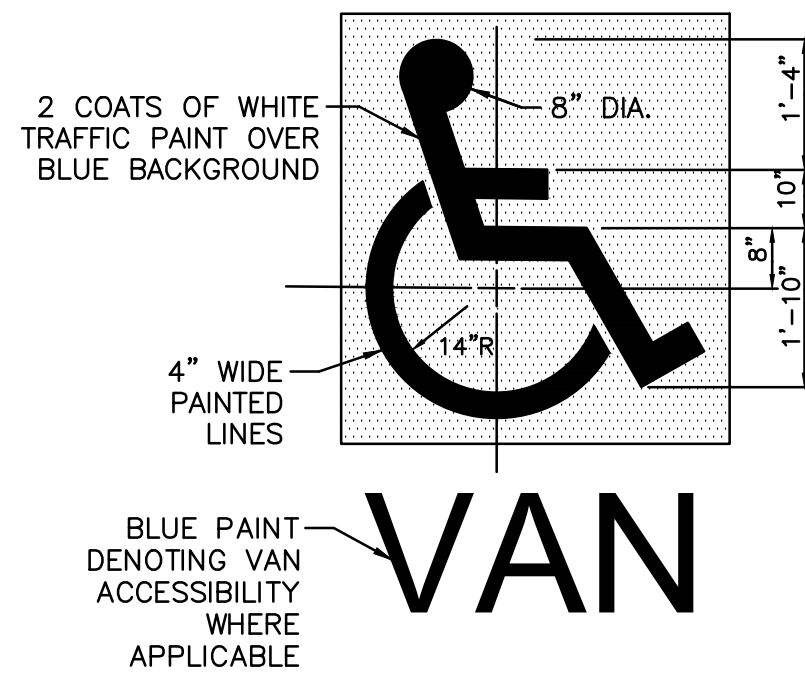
SECTION B-B

NO SCALE



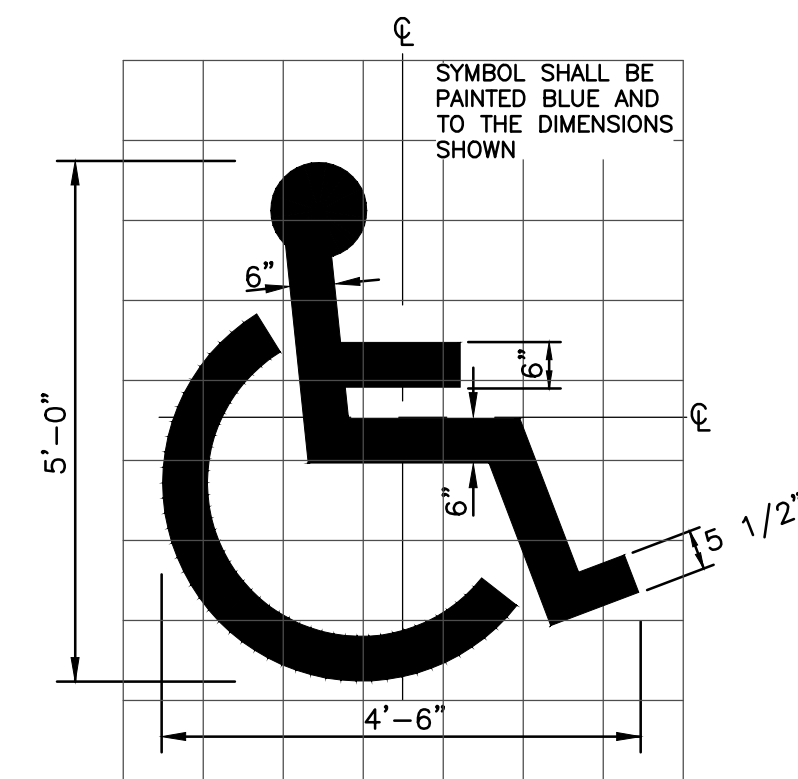
CONCRETE WALK

NO SCALE



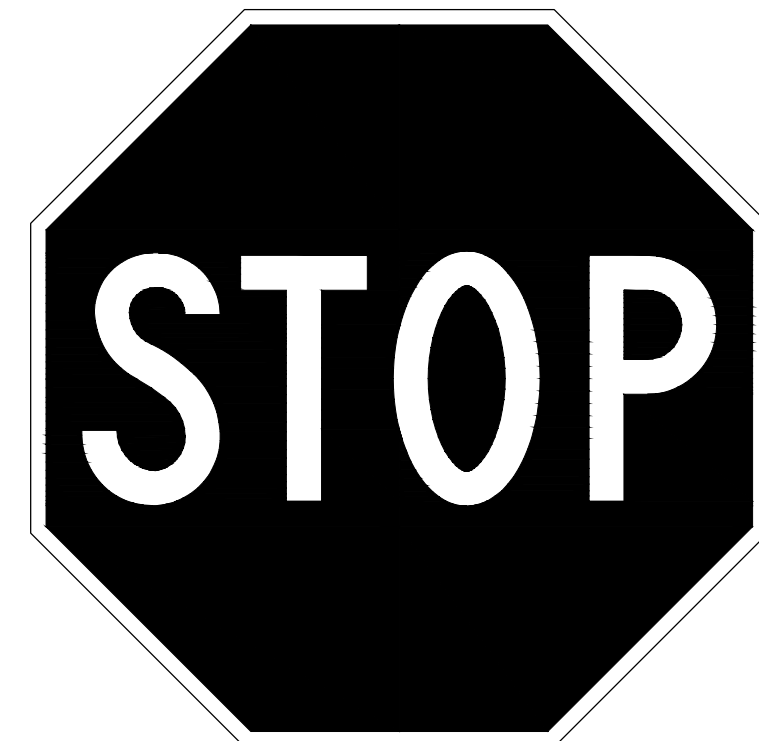
ACCESSIBLE SYMBOL

N.T.S.



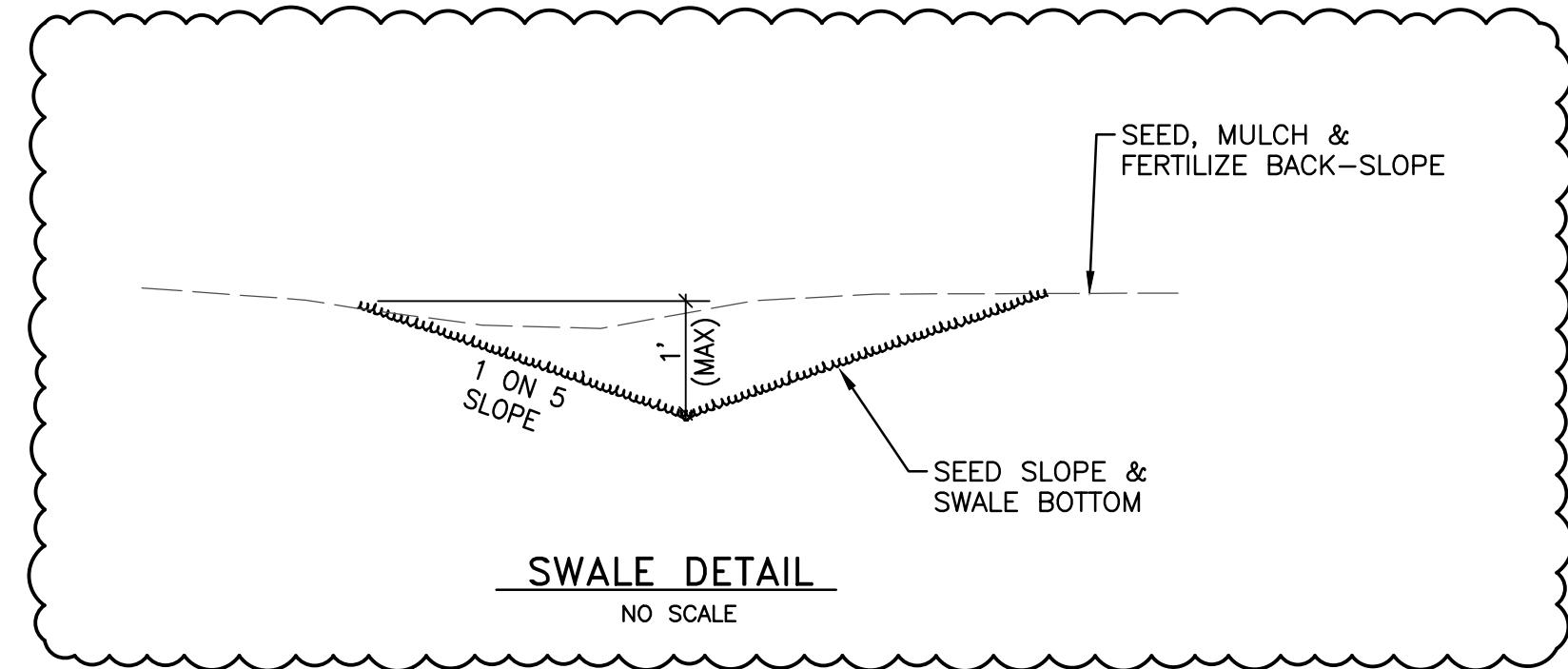
HANDICAP SYMBOL PAINT DETAIL

NO SCALE



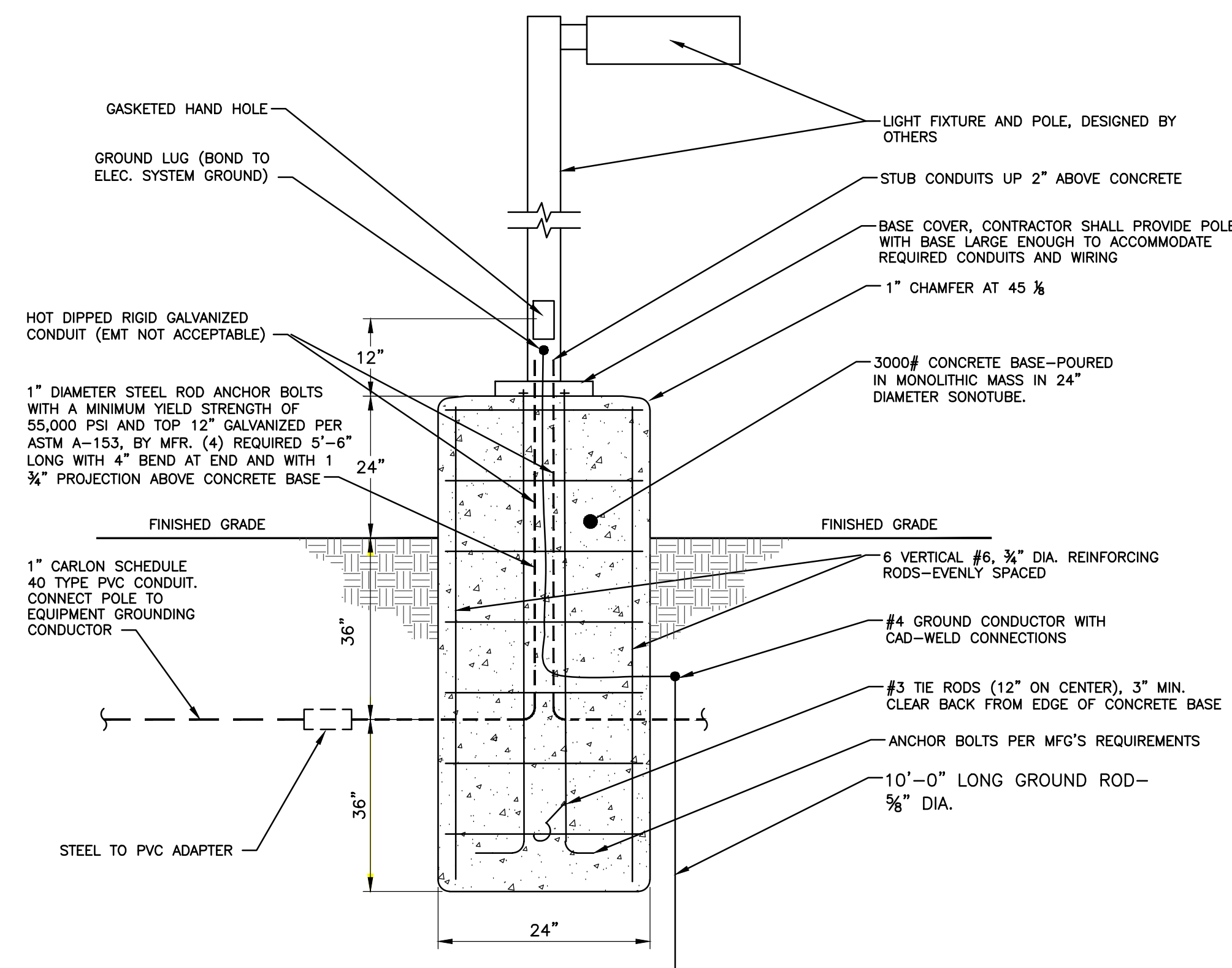
COLORS: LEGEND -WHITE (RETROREFLECTIVE)
BACKGROUND -RED (RETROREFLECTIVE)
BOTTOM OF SIGN SHALL BE MOUNTED
7'-0" ABOVE GRADE OR AS DIRECTED
BY OWNER.

R1-1
STOP SIGN



SWALE DETAIL

NO SCALE



TYPICAL LIGHT POLE AND FOUNDATION

N.T.S.

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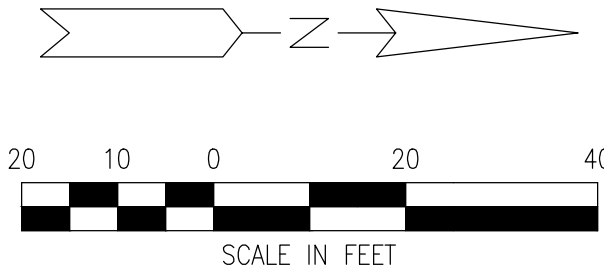
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SIGNATURE: lmvrs

DATE: 01/23/2023



PROPOSED LEGEND

STORM SEWER/DRAINAGE

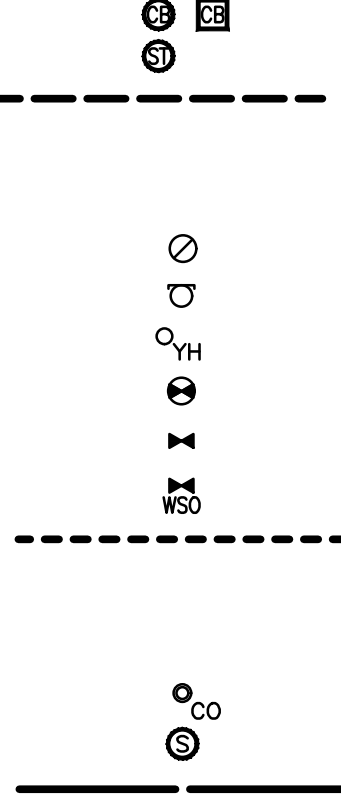
CATCH BASIN
STORM MANHOLE
STORM SEWER

WATER (DOMESTIC)

WATER WELL/MANHOLE
BLOW-OFF VALVE
YARD HYDRANT
GATE VALVE & BOX
VALVE
SHUT OFF VALVE
WATER SERVICE

SANITARY SEWER

CLEAN OUT
SANITARY MANHOLE
SANITARY SEWER



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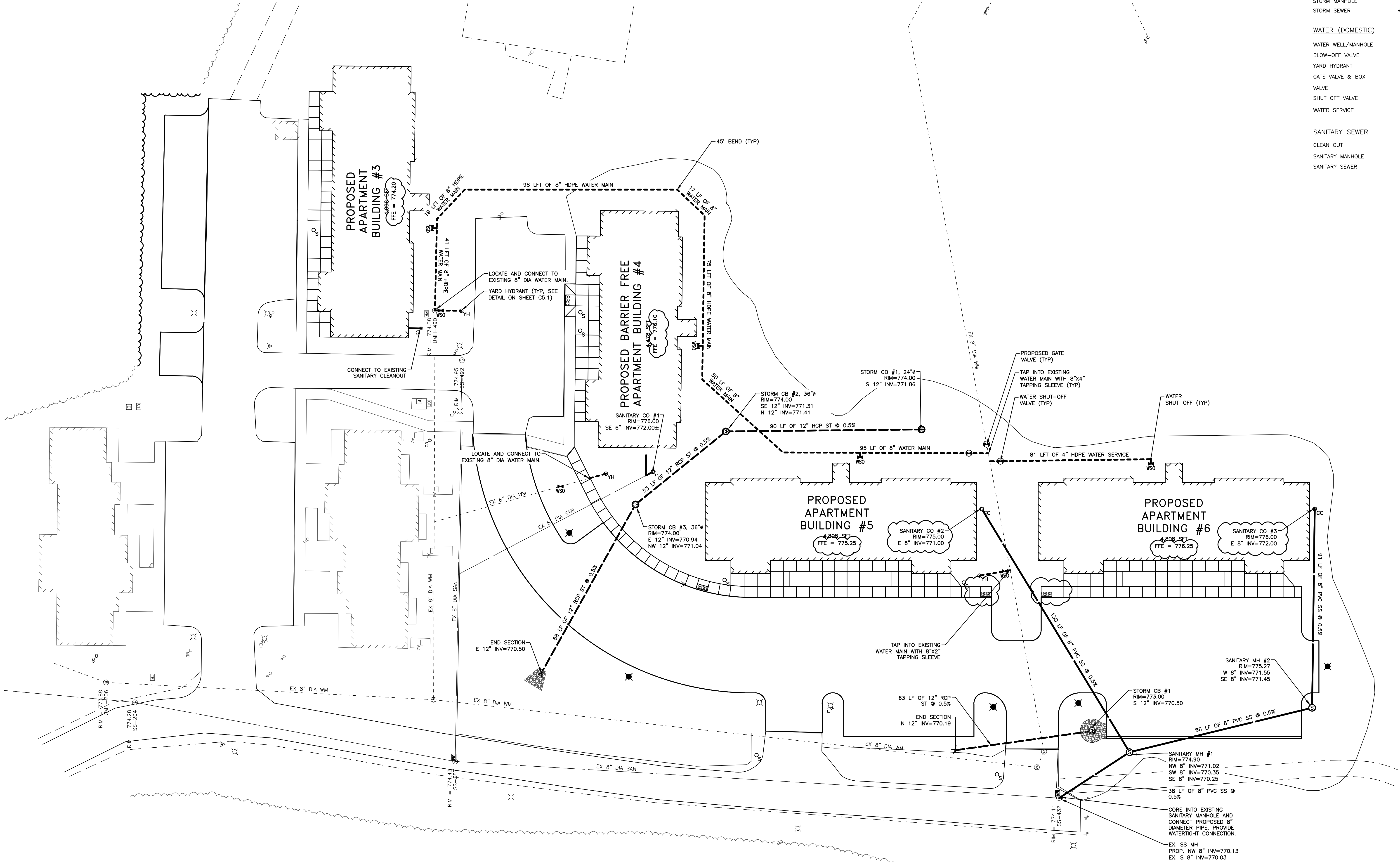
DRAWING TITLE
UTILITY PLAN

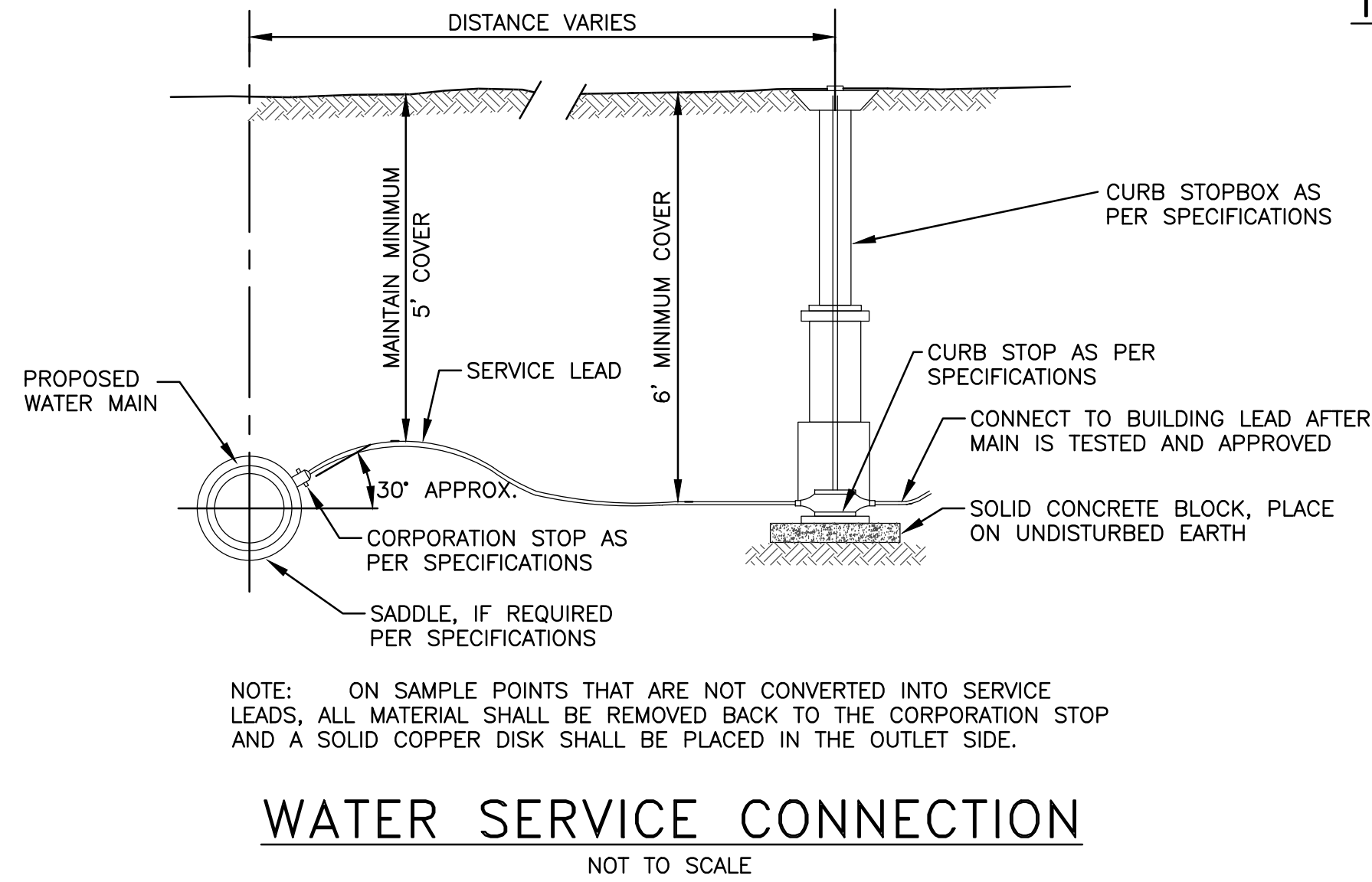
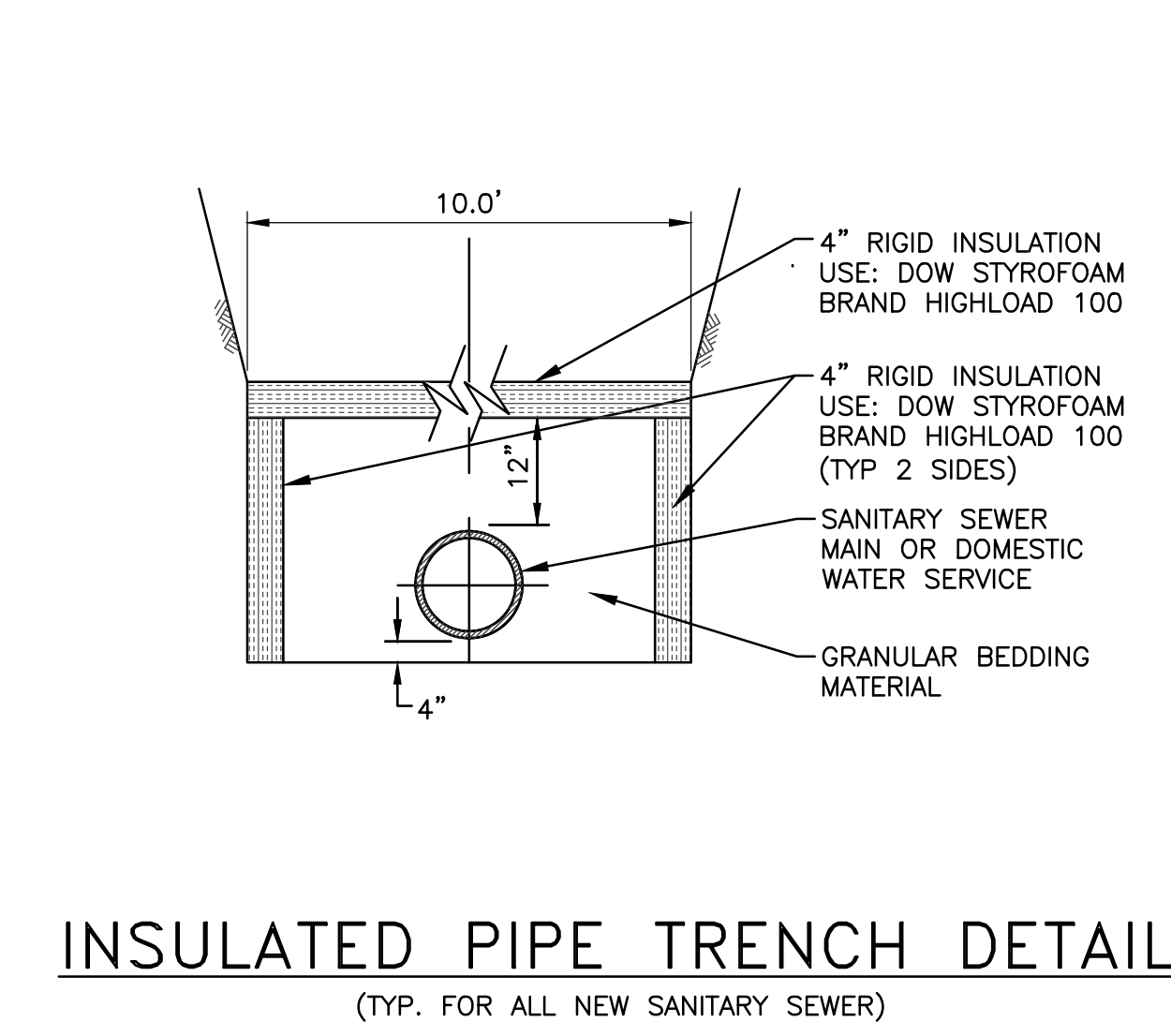
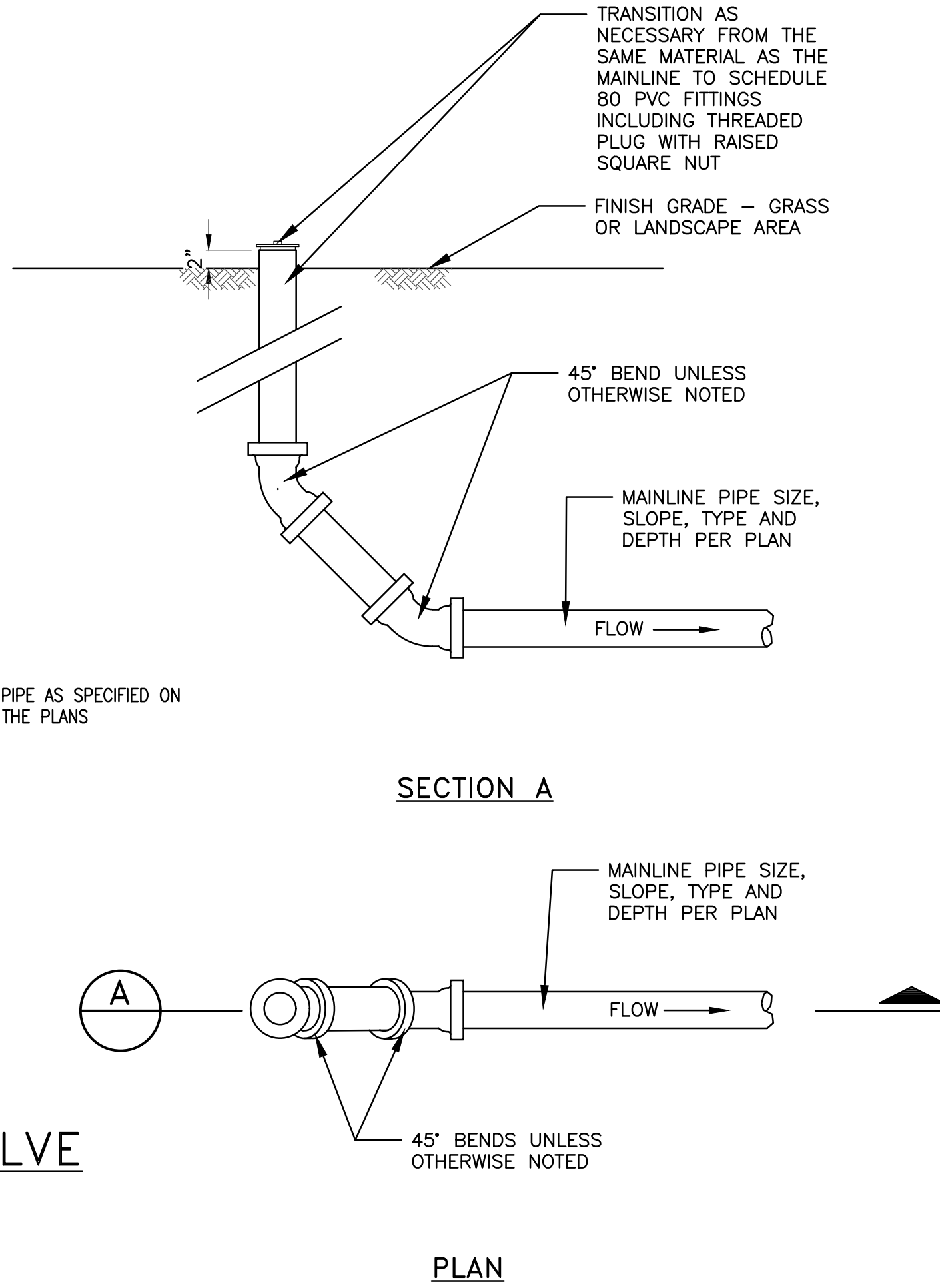
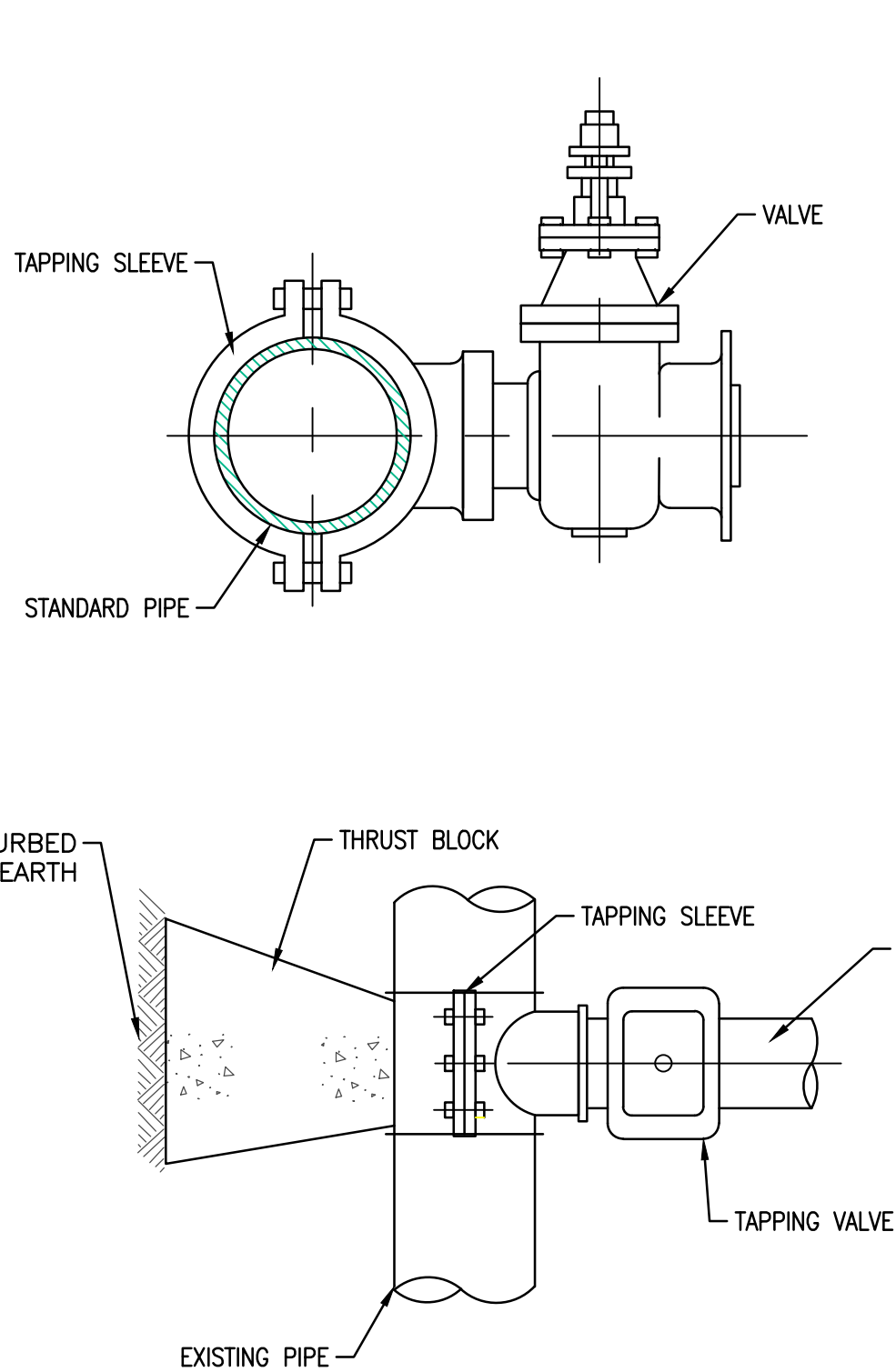
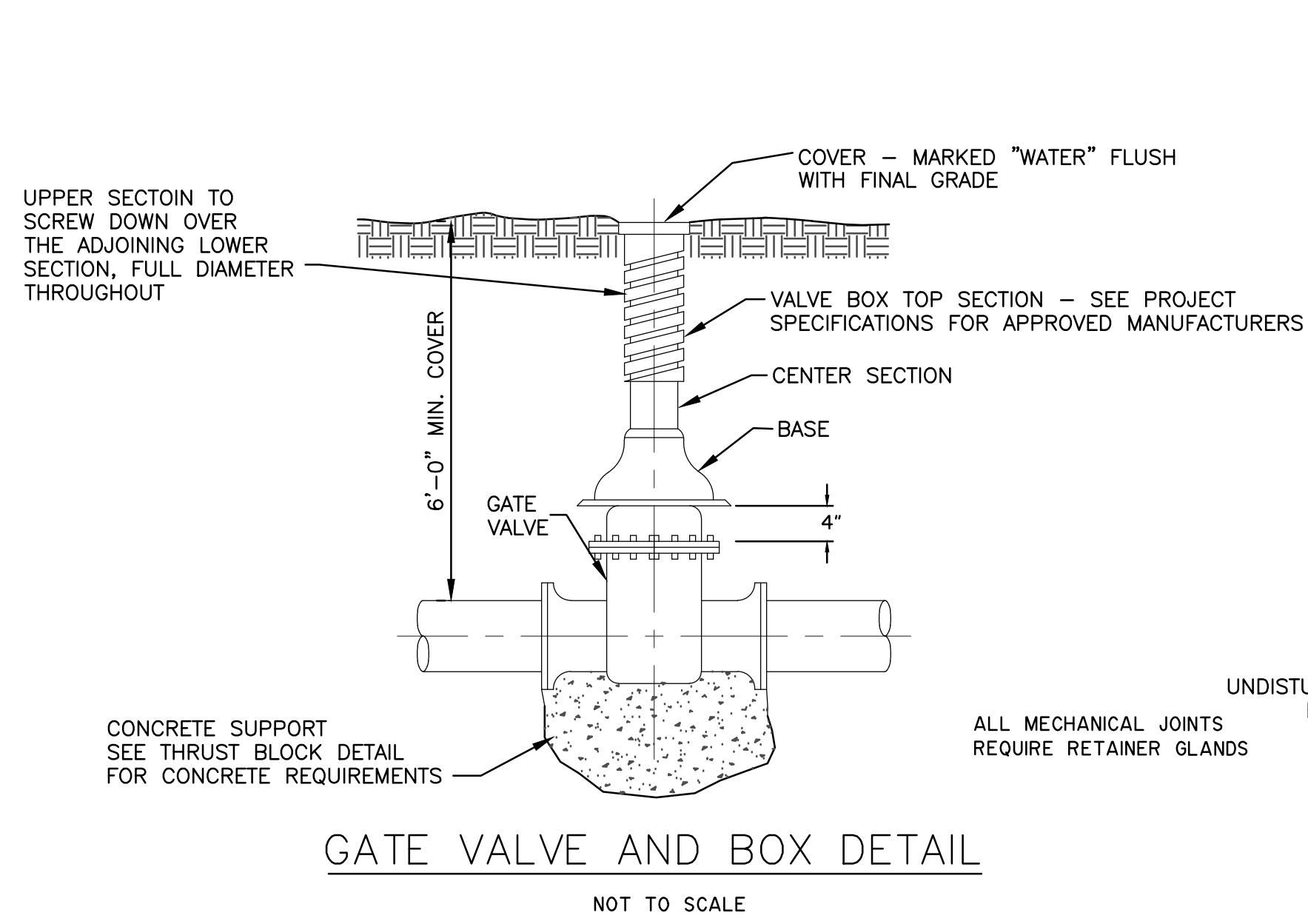
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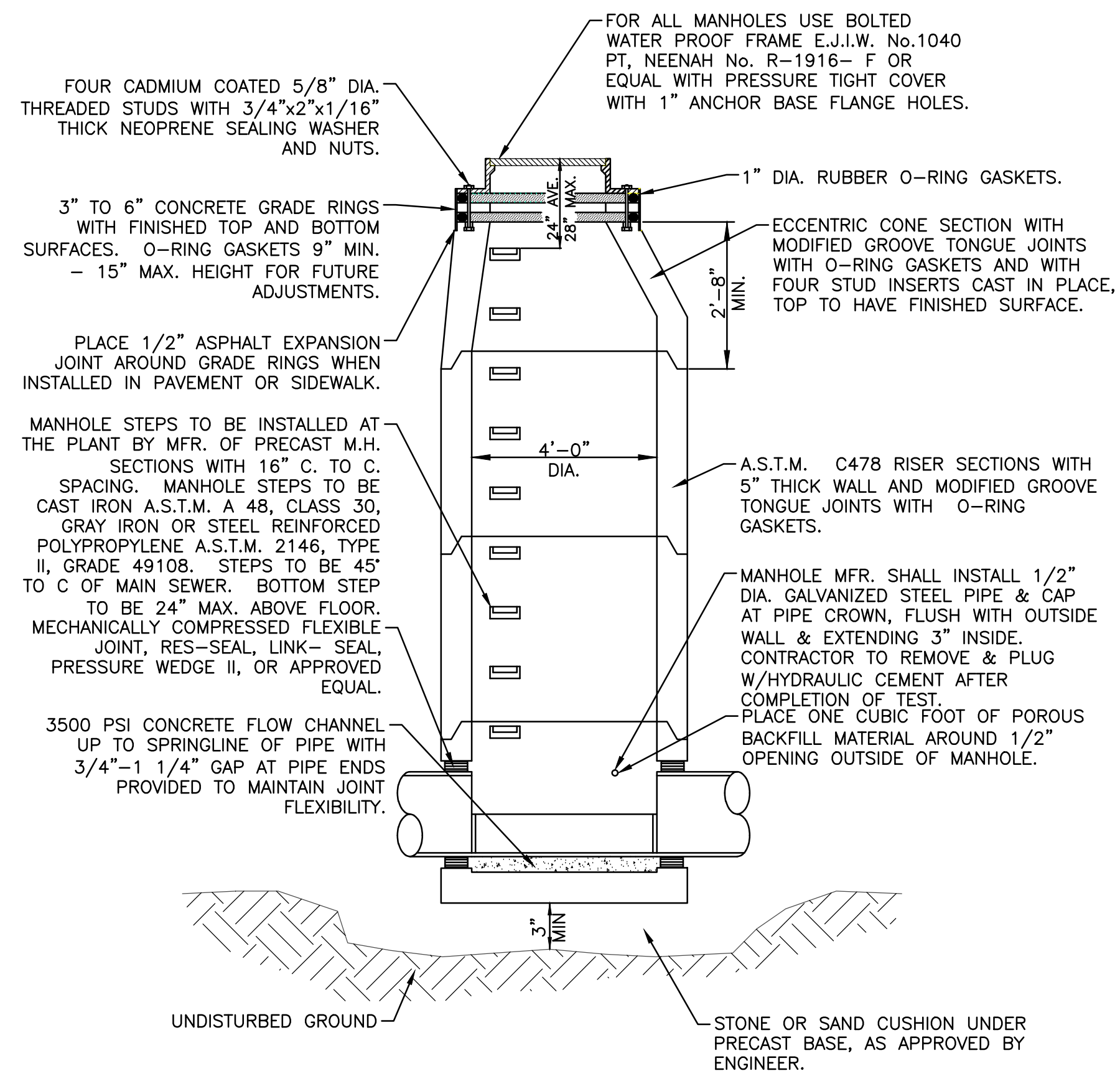
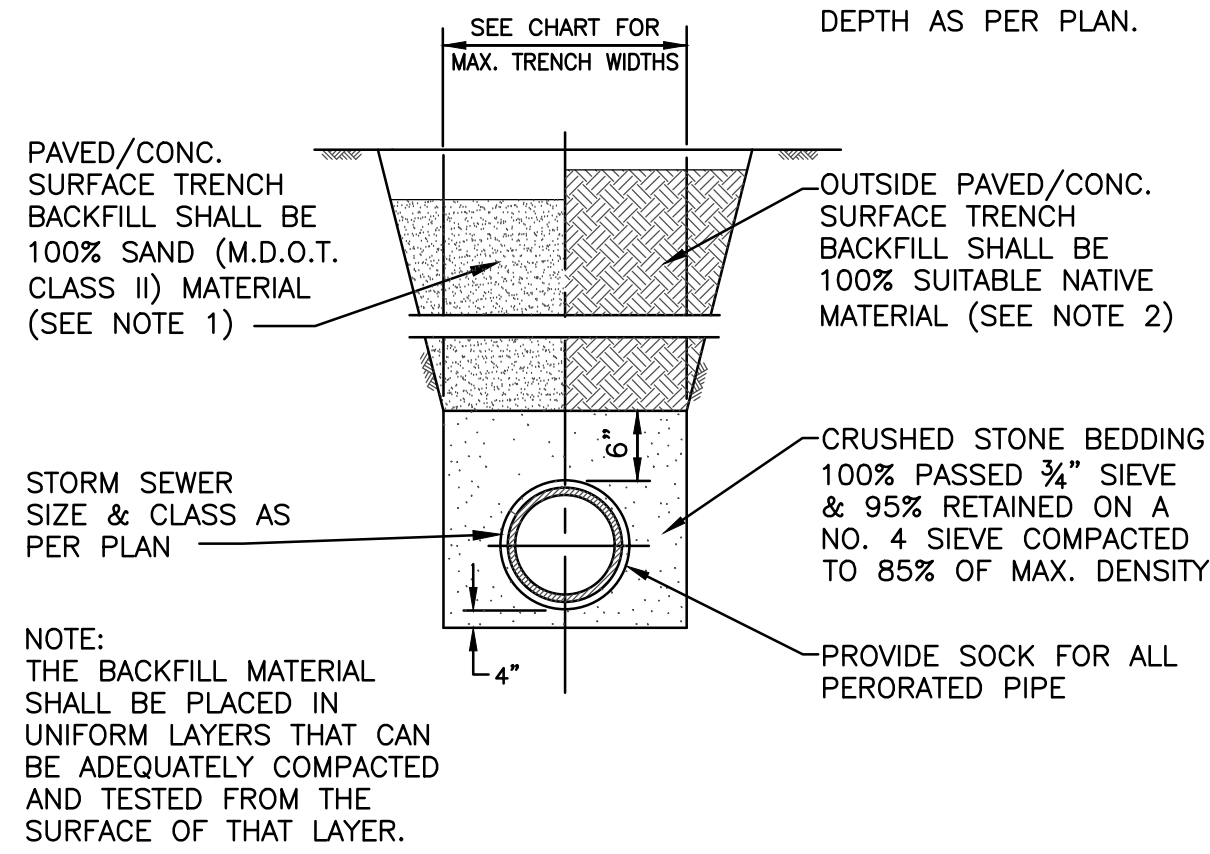
SHEET
C5.0





TRENCH WIDTHS	
MAX WIDTH OF TRENCH 12" ABOVE TOP OF PIPE	
6" THRU 12" PIPE - 30" WIDE	
15" THRU 36" PIPE - O.D. + 16"	
42" THRU 60" PIPE - O.D. + 20"	
OVER 60" PIPE - O.D. + 24"	

- NOTES:
1. ALL PIPE THAT RUNS UNDER THE PAVED, GRAVEL OR CONCRETE SURFACE AND WITHIN A 1 ON 1 INFLUENCE TO RECEIVE 100% SAND BACKFILL COMPACTED TO 98% OF MAX. DENSITY DEPTH AS PER PLAN.
 2. ALL PIPE THAT RUNS OUTSIDE THE PAVED, GRAVEL OR CONCRETE SURFACE SHALL BE BACKFILLED WITH 100% SUITABLE NATIVE MATERIAL TO 90% OF MAX. DENSITY DEPTH AS PER PLAN.



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DRAWING TITLE
UTILITY DETAILS

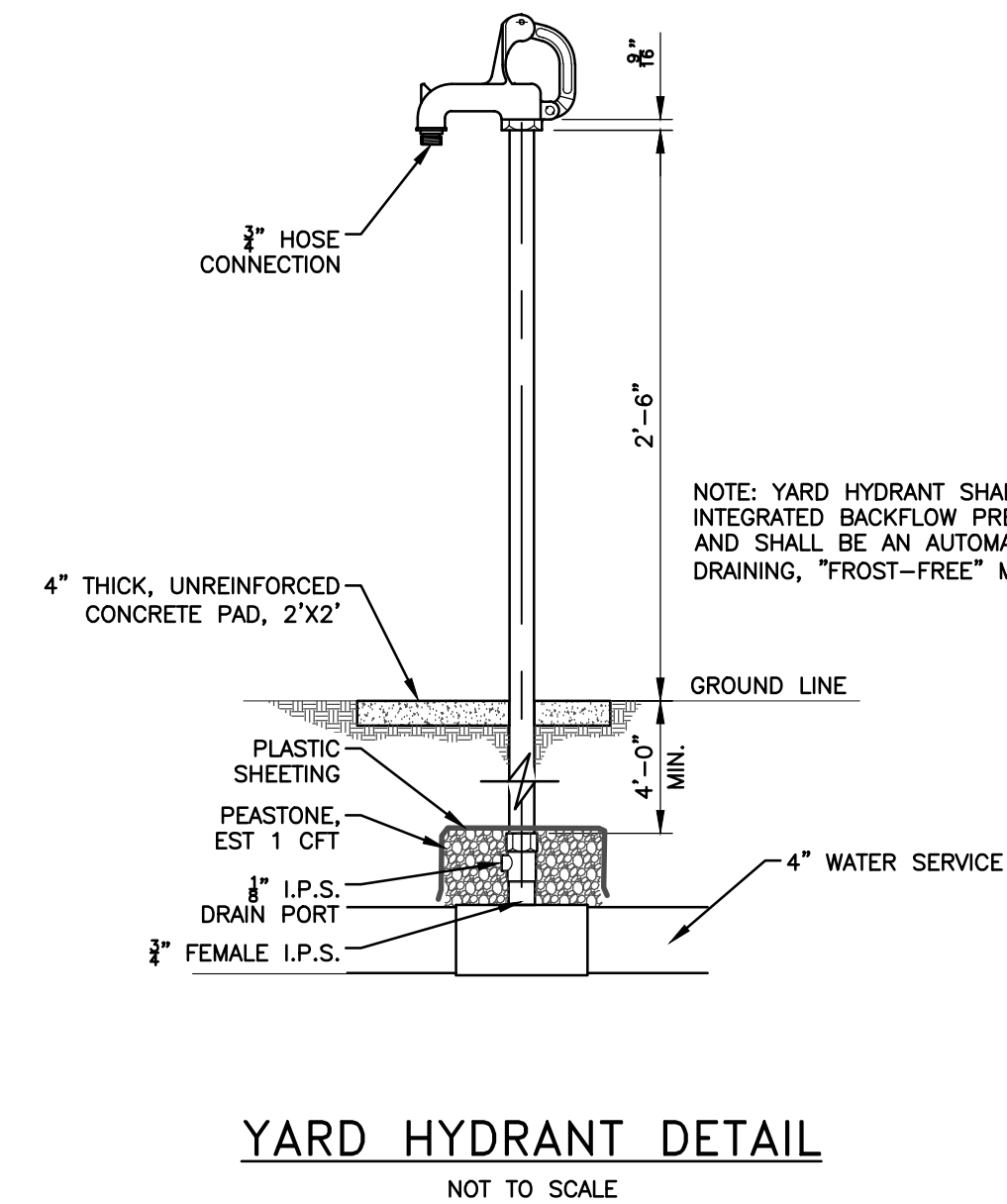
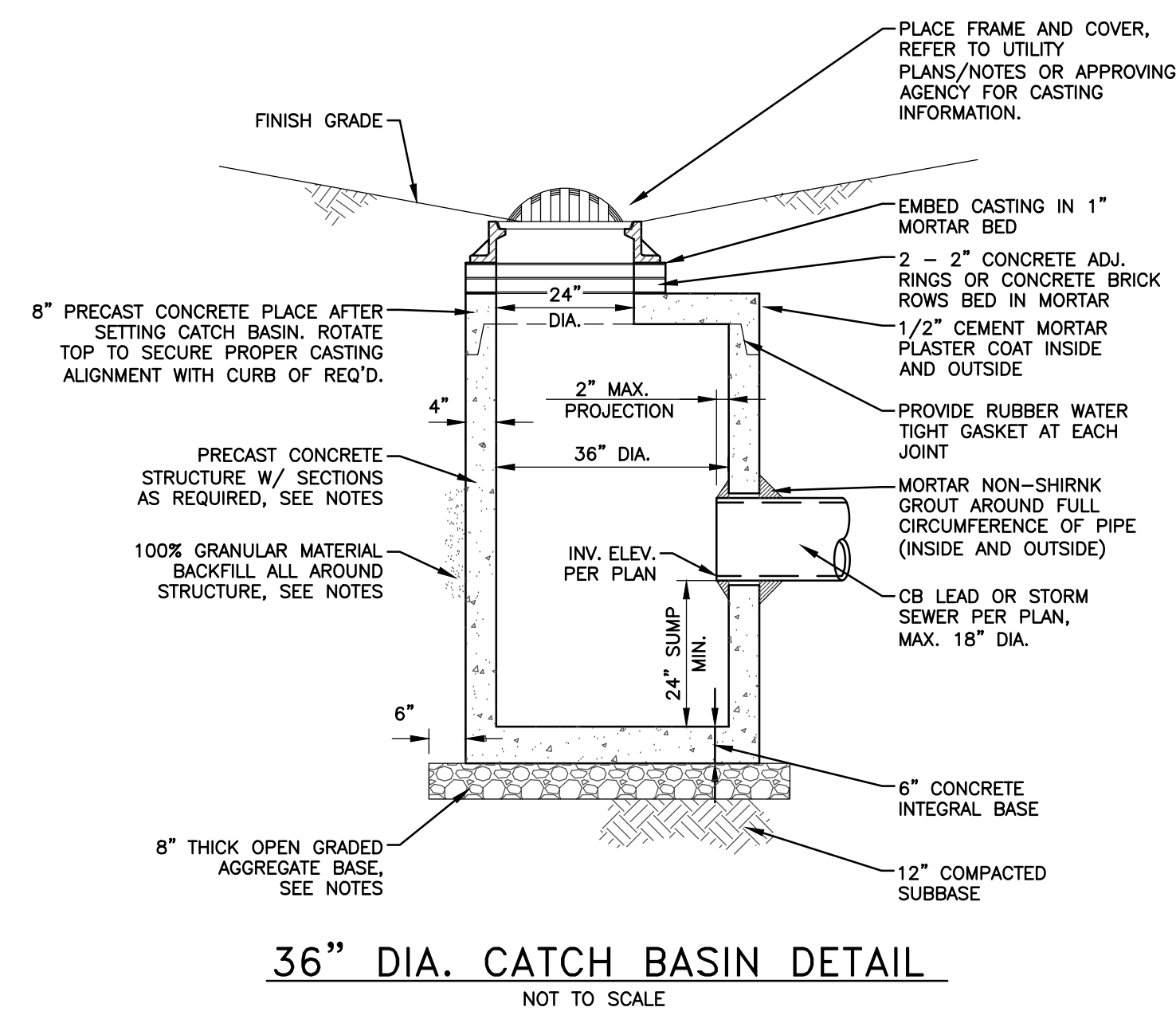
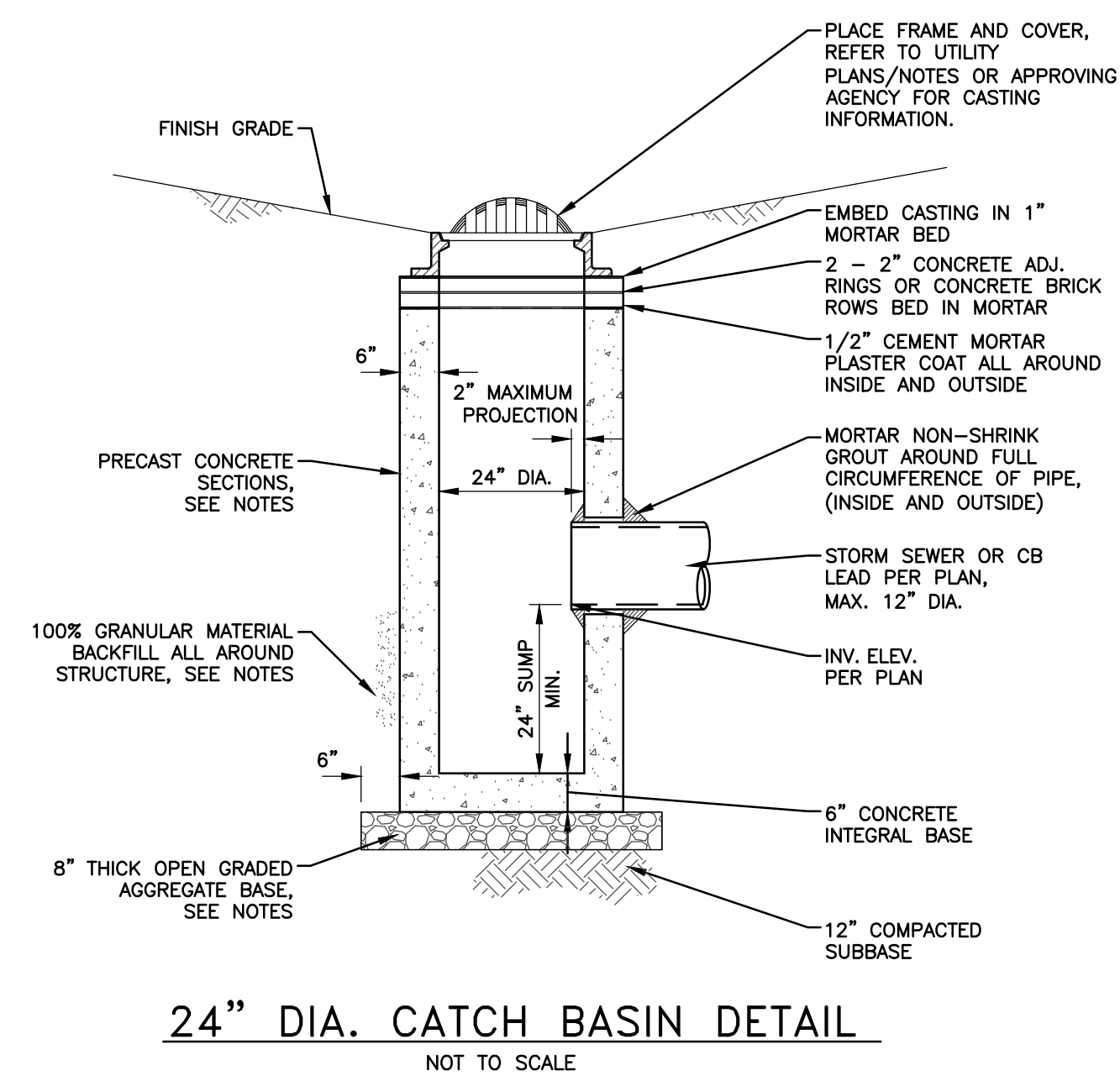
PROJECT TITLE
LITTLE TRAVERSE BAY BAND OF OJAWA INDIANS
MURRAY ROAD APARTMENT DEVELOPMENT
PETOSKEY, MICHIGAN

PROJECT NO.

273-19

DATE
MAY 1, 2020

SHEET
C5.1



REVIEWED FOR CODE COMPLIANCE

These plans and documents have been reviewed and found to be in compliance with the applicable code requirements of the jurisdiction. Issuance of a permit is recommended subject to approval by other departments and any noted conditions. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards nor relieve the owner, design professional of record or contractor of compliance with the applicable codes and standards. Plan review of documents does not authorize construction to proceed in violation of any federal, state, nor local regulation.

BUREAU VERITAS NORTH AMERICA, INC.

SIGNATURE: fmyers

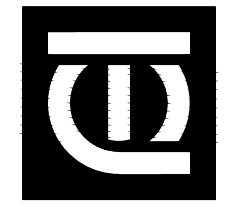
DATE: 01/23/2023

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WT PROJECT #
APF2032.016

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DRAWING TITLE

UTILITY DETAILS

PROJECT TITLE

LITTLE TRAVERSE BAY BAND OF ODAWA INDIANS
MURRAY ROAD APARTMENTS
PETOSKEY, MICHIGAN

PROJECT NO.

273-19

DATE _____

MAY 1, 2020

C5.2